The Incidence of Cousin Marriages in a West-Swedish Rural Community

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THE COLLECTION OF DATA on consanguineous marriages for different regions is important from the point of view of population genetics. As one aspect of marriage customs, it should also interest cultural anthropology.

In Sweden, cousin marriages are not officially registered. Data may be obtained by interviews or objective genealogic investigations. However, interviews are of limited value even if one has secured a random sample of marriages. Hence in this work, as well as in a previous one (Böök 1948) and in those under way, we have used the latter method, although it requires a large amount of work.

AREA AND POPULATION

For this investigation, we have selected the rural community (or parish) of Östmark, located in the County of Värmland in middle West-Sweden (cf. fig. 1). The total area is 397 sq. km. of which 16 sq. km. are lakes or rivers. Only about 20 per cent of the area is cultivated, the remainder being forest. The original settlements were made during the thirteenth century by settlers of Swedish stock. Later, during the seventeenth century, a substantial immigration of people of Finnish stock took place. Thus in 1841, the total population was 3,800, of which 1,400 were registered as Swedes and 2,400 as Finns. The previous hostility between these two groups has eventually been straightened out. As late as one hundred years ago, there was only one by-road in the region. Overpopulation and poverty were characteristic features during earlier periods, which resulted in an emigration of over 2,000 people to the United States. Insufficient communications and relative geographic barriers have made the area very isolated and most of the small villages in the periphery obtained road connections only some 15 or 20 years ago. Out-migration to other parts of Sweden also contributed to the reduction of the population from a maximum of 5,326 in 1861 to a minimum of 2,862 in 1950. During the same period, the average number of children per family has decreased.

Table 1 shows the average population during 1900–50 and in- and out-migration rates per 1,000. It should be noted that the migration rates actually show only the general mobility of the population. So *e.g.* many, perhaps most, immigrants are former residents of the area who were born there. The general mobility of this population appears similar to the different North-Swedish isolates studied by Sjögren 1932 and 1935, and Böök 1953 (cf. Böök 1953).

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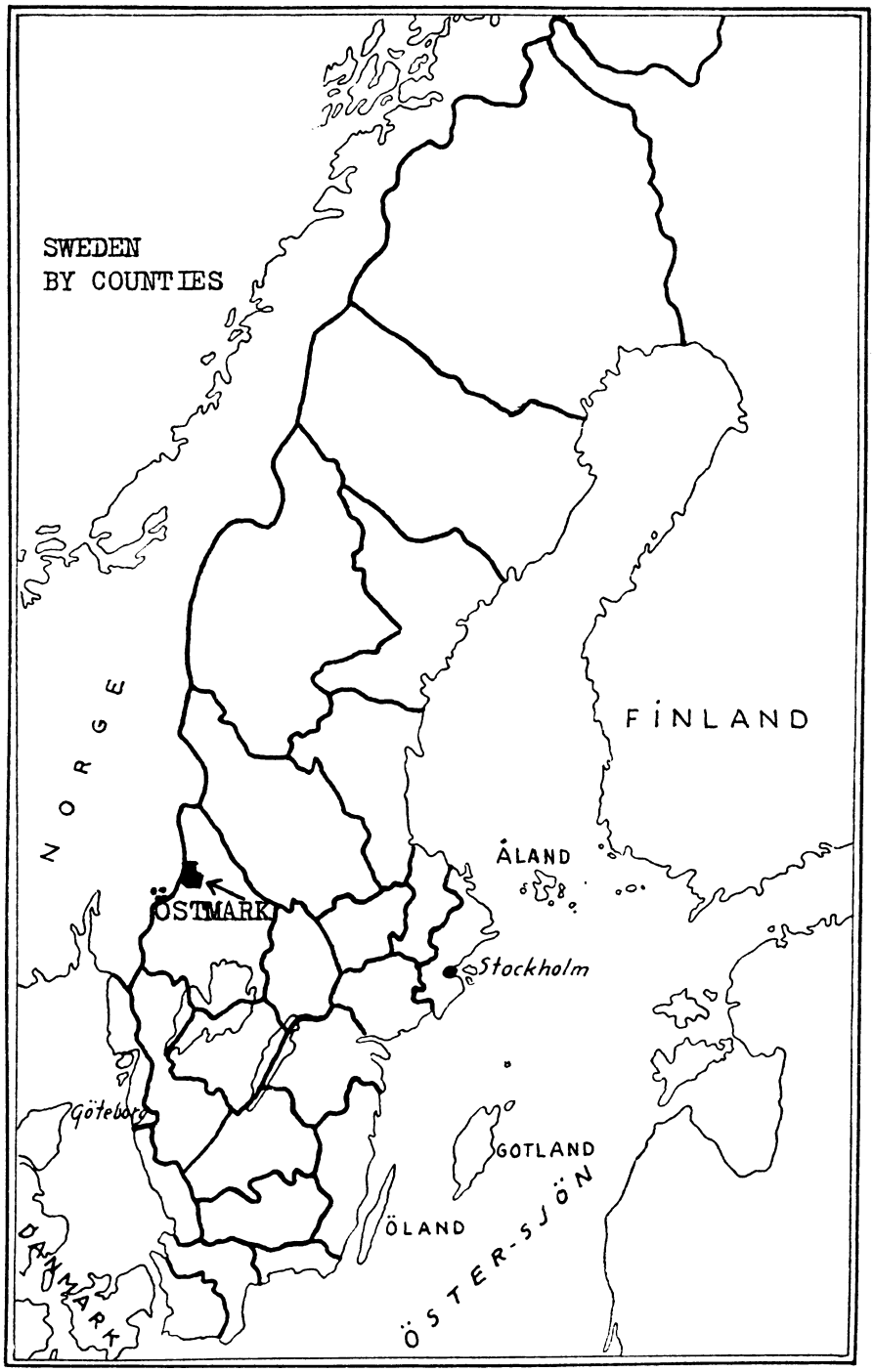

FIG. 1. Location of the area in which the incidence of first cousin marriages was determined

TABLE 1.—PARISH OF ÖSTMARK. AVERAGE POPULATION 1900–50 AND CRUDE MIGRATION RATES

Year	Average Population	Inmigration Per 1,000	Outmigration per Year
1901–10	4,148	13	32
1911–20	3,856	13	27
1921–30	3,716	17	31
1931–40	3,419	21	37
1941–50	3,046	50	34

TABLE 2.—PARISH OF ÖSTMARK. THE FREQUENCY OF FIRST COUSIN MARRIAGES ACCORDING TO THE CENSUS 1925 AND 1954

Year	No. of 1st cousin marriages	Contracted during	Total No. of marriages	Per cent 1st cousin marriage
1925	7	1905–25	570	1.2
1954	7	1910–41	535	1.3

The above features of this rural population indicate that it should be regarded primarily as a geographic isolate.

THE FREQUENCY OF FIRST COUSIN MARRIAGES

We have made two census studies which measure the incidence of first cousin marriages among all existing marriages with both partners living. Table 2 shows the result. The time period between the censuses is approximately one generation. No appreciable change has occurred.

One of us (Måwe) made extensive sociologic investigation in this area and found a certain reluctance against cousin marriages, even if there was no actual discrimination.

EFFECTIVE POPULATION SIZE

As we are concerned here with a decreasing population, the actually breeding group may be estimated according to the formula

$$\frac{2b(b-1)f}{c_i} = N_i \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (1)$$

where b is the average number of children per family who grow up and marry within the area, f the frequency of fertile marriages, c_i the incidence of first cousin marriages, and N_i the effective population size at the corresponding period of time. A full discussion of such estimates will be published elsewhere (Böök, 1955).

For b equalling 2.0 and 1.5 respectively, f 0.95 and c_i 0.0125, the effective population size 1925–54 should be between 100 and 300 individuals. It is probably closer to the lower figure, as the reduction in size of the total population during this period has been substantial.

This estimate, which, of course is rather crude, appears to show that, in spite of

modern civilization and technical developments, there are still rural communities in Sweden where the actually-breeding groups have remained quite small.

SUMMARY

At cross-section investigations by the genealogic method, the incidence of first cousin marriages in a Middle West rural community in Sweden (population 2,862 in 1950) was determined at 1.2 per cent in 1925 and 1.3 per cent in 1954. The effective population size was estimated at 100–300.

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